

APPARATUS AND METHOD FOR CONTROLLING QUEUING OF DATA AT A
NODE ON A NETWORK

Abstract of the Disclosure

5 An approach to queuing data at a network switching node includes assigning a
queue value such as a priority value or a weight to each of a plurality of queues which
temporarily store data packets to be forwarded toward a link on the network. A bandwidth
value related to a maximum amount of data to be transferred on the link is defined. A data
limit value is assigned to each of the queues to limit the amount of data that can be
forwarded from each queue. The data limit value is derived from the bandwidth value for
10 the link. By placing bandwidth-related limits on the queues, low-priority queues are
prevented from being dominated by high-priority queues, that is, low-priority queues are
not prevented from forwarding their data by the priority structure. Also, the bandwidth-
related limits allow for control of traffic flow to prevent overloading lower-capacity links
on the network.

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